

Research Article

Efficacy and safety of Sufoof Jawahar Mohra (A Unani formulation) in modulating host immune status of H.I.V positive patient with reference to CD4 (Helper T cells) absolute count.

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ABSTRACT

A 24 years old male HIV positive individual whose CD4 (Helper T cells) count was 695(Cells per cummm),. was registered in the OPD of Regional Research Institute of Unani Medicine. The SJM was given in the dose of 250 mg orally twice a day after meal. The CD4 (Helper T cells) absolute count was done at every 6 month during the treatment. The CD4 (Helper T cells) absolute count was increased remarkably at every follow-up. Laboratory Investigations, Liver profile and Renal Profile and Urine Examination were also done at the time of visit for safety parameters. It has been observed that the CD4 (Helper T cells) absolute count increased from 695 to 829 (Cells per cummm). Further laboratory investigations also revealed that there were no side effects during treatment and after one year of treatment. No other direct or indirect manifestations or clinical sign and symptoms of AIDS were noticed during treatment.

Key words: Sufoof Jawahar Mohra, Unani Medicine, *Hararat-e-ghareezi*, vital organ tonic

INTRODUCTION

HIV continues to be a major global public health issue since the beginning of the epidemic, 75 million people have been infected with the HIV virus and about 32 million people have died of HIV. Globally, 37.9 million [32.7–44.0 million] people were living with HIV at the end of 2018. An estimated 0.8% [0.6-0.9%] of adults aged 15–49 years worldwide is living with HIV, although the burden of the epidemic continues to vary considerably between countries and regions. The WHO African region remains most severely affected, with nearly 1 in every 25 adults (3.9%) living with HIV and accounting for more than two-thirds of the people living with HIV

worldwide ¹. since the start of the epidemic over 25 years ago, with 3.5 to 6.6 million of new infections in 2005¹. The death toll has reached 14 million adults and children with an estimated 2.5 to 3.5 million of those deaths occurring during 2006 ^{3,4}.

There are a lot of researches have been done in the past and present in the modern medicine and no doubt there are good Antiretroviral drugs for treating AIDS but worst part of ART is they have severe own side effects. Therefore there is still need to search some safe therapeutics for HIV/AIDS. There are strong possibilities that some drugs of natural origin, either from plants or

minerals would prove effective enough to modulate immunity to defend with HIV, at different levels of its replicative cycle. There are many Unani formulations composed of herbs and minerals particularly gems, which are used as *Muqawwi-e-aam* (general body tonic) for the purpose of improving functions of vital organs, increasing *Hararat-e-ghareezi* (metabolic heat) and *Rooh* (vital energy or life force) and for boosting the immune systems. The Safoof Jawahar Mohra is one of such drug, but it has not been scientifically evaluated for the above functions. In the present study the Safoof Jawahar Mohra, containing plant and minerals origin drugs, was prepared according to the formula described in the National Formulary of Unani Medicine (Government of India). The drug considering its efficacy as general body tonic and vital organ tonic². Hence on the basis of its actions of SJM and its ingredients SJM was given to this HIV individual.

Case Study

A 24 years old male HIV positive individual whose CD4 (Helper T cells) count was 695 (Cells per cumm) was registered in the OPD of Regional Research Institute of Unani Medicine, Mumbai. The individual was detected HIV which was confirmed by Western blot along with ELISA test. The patient was reached to ART Department, J.J. hospital Mumbai where he was registered but informed that when CD4 (Helper T cells) count will fall then they will start ART. The patient

came at RRIUM, Mumbai and registered in the OPD.

Examination of Patient

- Patient Past Medical, Social & Family History was taken. The patient was unmarried and upper middle class family and no family history of HIV/AIDS, no history of any addiction like alcohol and smoking etc. No relevant history of allergy of drug, diets or environmental articles. No history of other STDs, such as syphilis, herpes, gonorrhea and Chlamydia. No history of unprotected anal or vaginal sex without a condom sharing drug injecting equipment, tattooing, piercing and other procedures with unsterile needles or equipment .

MATERIALS AND METHODS.

A confirmed HIV positive infected male individual was registered in the OPD of Regional Research Institute of Unani Medicine, Mumbai. The patient was treated with Unani Medicine SJM 250mg capsule orally twice a day . The preparation of the test drugs i.e. Sufoof Jawahar Mohra (SJM) was done according to standard method described in the national formulary of Unani medicine (Govt of indai)². The ingredients of SJM have mentioned in the table 1. The follow up of the patient was done every 15 days. Pathology and biochemical investigations were also done at every 3 months. The result was noted in case report file at every visit after observation of clinical features and examinations.

Table 1.Formula of Safoof Jawahar Mohra (SJM)

| S. No. | Ingredients | Scientific names | Proportion |
|--------|---------------|------------------|------------|
| 1. | ZeharMohra | Serpent Stone | 30 gm. |
| 2. | Marwareed | Pearl | 10 gm. |
| 3. | Bussud | Red coral | 10 gm. |
| 4. | Kehroba | Vateriaindica | 10 gm. |
| 5. | Lajward | Lapis lazuli | 10 gm. |
| 6. | Yaqoot | Ruby | 10 gm. |
| 7. | Yaqoot Kabood | Sapphire | 10 gm. |

| | | | |
|-----|------------------|-----------------------|---------------------------|
| 8. | YaqootAsfar | Topaz | 10 gm. |
| 9. | YashabSabz | Green Jade | 10 gm. |
| 10. | Zamuurrad | Emerald | 10 gm. |
| 11. | AqeeqSurkh | Red Agate | 10 gm. |
| 12. | Warq-e-Nuqra | Silver leaves | 10 gm. |
| 13. | Mastagi | Pistacialentiscus | 10 gm. |
| 14. | Warq-e-Tila | Gold leaves | 10 gm. |
| 15. | Jadwar | Delphinium denudatum | 10 gm. |
| 16. | NarjeelDaryi aee | Lodoiceaseychell arum | 5 gm. |
| 17. | Arq-e-Gulab | Rose water | Q.S. (Approx. 700 ml.) |

Observation

Table 2. Showing efficacy and safety of SJM on CD4 Count

| CD4 (Helper T cells) absolute count | | |
|---|--|---|
| (Before treatment) Base line | After treatment (6 th month) | After treatment (12 th month) |
| 695.000 | 774.000 | 829.000 |
| Liver Profile | | |
| Serum S.G.O.T | 30.0 | 29.0 |
| Serum S.G.P.T | 39.0 | 32.0 |
| GGT | 17.0 | 19.0 |
| Serum Bilirubin | 0.6 | 0.6 |
| Serum Albumin | 4.4 | 4.5 |
| Serum Globulin | - | 3.500 |
| Renal Profile | | |
| Serum Urea | 23.57 | 23.57 |
| Serum Creatinine | 1.01 | 0.97 |
| Serum Calcium | 9.6 | 9.3 |
| Serum Phosphorus | | 4.1 |
| Serum Uric Acid | 5.39 | 5.83 |
| Serum Sodium | 139.0 | 140.0 |
| Serum Potassium | 3.8 | 4.2 |
| Serum Chloride | 101.0 | 101.0 |
| Serum Albumin | 4.4 | 4.5 |

RESULT:

It has been observed that CD4 (Helper T cells) absolute count increases significantly (Table 2) It has been also observed that the quality of life and confidence level was improved due to the continue increasing CD4 count. No other direct or indirect manifestations or clinical sign and symptoms of AIDS were noticed. It has been also

observed that the SJM is safe (table 2) and no side effects even if SJM taken long time.

DISCUSSION :

It has been observed that the CD4 Count after 6 months and 12 months increased significantly. The improvement in the CD4 count might be due to the various ingredients of Sufoof Jawahar

Mohra whose actions described in the Unani classical books. The Zehar Mohra (Serpent stone) is described as vital organ tonic, antidote to poisons, protects quwa (faculties) and arwah (vital force), purifier and detoxicant of body humours, strengthens the muscles^{5,6,7,8,9}. The Marwareed (Pearl) is described as exhilarant, enhances body faculties and vital force, tonic for vital organs, stimulant, anti-depressant^{13, 14}. The Bussud (Red Coral) is described as astringent, desiccant, exhilarant, nervine and heart tonic etc^{10,11,12}. The Kehrubā (Vateria indica) is described as alexipharmic, tonic. The Larjward (Lapis lazuli) is described as exhilarant general body tonic^{12, 13, 14}.¹⁵. The Yaqoot Surkh (Ruby) is described as, heart and brain tonic, exhilarant, blood purifier, enhances and protects *hararat-eghareezi* (body energy) etc.^{11,14, 16}. The Yaqoot Kabood (Sapphire) is described as exhilarant, general body tonic, brain tonic.^{9,10,11,13 15}.

CONCLUSION

The study concluded that CD4 (Helper T cells) absolute count increases significantly and improved the quality of life and confidence level. No other direct or indirect manifestations or clinical sign and symptoms of AIDS were noticed. The SJM is safe and no side effects even if SJM taken long time. Hence it is recommended to study on SJM on large sample size to evaluate the efficacy and safety.

REFERENCES

1. Global Health Observatory (GHO) data <https://www.who.int/gho/hiv/en/#es>
2. Anonymous 1993. National Formulary of Unani Medicine, Part I (Urdu edition), Ministry of Health & Family Welfare (Department of Health), Government of India, New Delhi, India, pp. 346-47.
3. http://www.theglobalfund.org/en/media_center.
4. <http://en.wikipedia.org/wiki/UNAIDS>.
5. Asif, M, Tariq, M., Tamanna, S.A. and Ahmad, M.U. (1981): The sterols and fatty acids of *Delphinium denudatum* roots. C. Abstr. (11 plant Biochem.) 95 (8), 363: Abstr. 129413C. or (Fette. Scefien. Anstrichm. 1981, 83, 8: 323-4 Eng.).
6. Ashraf, M, (ynm): Makhzanul Mufradat Mae Murakkabat Wa Khwasul Advia, Rizvi Kutub Khana, Urdu Bazar, Lahore, Pakistan; pp.142-263
7. Attar, Z. (1887): Ikhtiyarat-e-Badie, Matba Munshi Nawal Kishore, Kanpur, India. 55-568. .
8. Rao, T.K. (2004): Astrological influence of gem stones on human body, thesis Submitted in the department of Geology A.M.U. Aligarh, U.P., India. p.76.
9. Ghani, M.N. (1926): Khazainat-ul-Advia: Vol. I, II, and III, Matba Munshi Nawal Kishore, Lucknow, India. Pp.95-97
10. Hakim, M.A. (2002): Bustan-ul-Mufradat, Karkhana Jamil-ul-Advia, Lucknow, India. pp.118-119
11. Hijazi, M.R. (1997): Kanzul-Taklees, Aam Kitab Ghar, Darya Ganj, New Delhi, India. P.23
12. Ghani, M.N. (1913): Khazainat-ul-Advia: Vol. I, II, and III, Matba Munshi Nawal Kishore, Lucknow, India. p.63
13. Hijazi, M.R. (1997): Kanzul-Taklees, Aam Kitab Ghar, Darya Ganj, New Delhi, India. P.23
14. Husain, S.M. (1875): Makhza-nul- Advia: Vol .I (Urdu translation by Maulvi Noor Karim), Matab Munshi Naval Kishore, Lucknow, India. pp.66-69
15. Husain, S.M. (1897): Qarabadden-e-Kabir: Vol .I (Urdu translation by Hadi Husain Khan), Matab Munshi Naval Kishore, Lucknow, India. pp .42-41
16. Husain Akhtar (1993): Essential oil plants and their cultivation, Central Institute of Medicinal and Aromatic Plants, Lucknow, India. pp.7-38